表面裂紋承受反平面移動動力載荷之暫態全場解析與計算

A numerical method based on the axisymmetric, incompressible Navier-Stokes equations is combined with a lifting surface method to predict the performance and vortex wake of hovering rotors. The lifting surface method is used to obtain the circulation distribution on the blade. This circulation distribution is served as input to the Navier- Stokes calculation to compute the shape of the vortex wake under this specified circulation distribution. The vortex wake is then input back to the lifting surface method to calculate the circulation distribution under this vortex wake. An iteration approach is utilized between these two methods to converge the circulation distribution and the shape of the vortex wake.